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EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/562,380	GSCHIERMEISTER ET AL.	
	Examiner	Art Unit	
	KimbleAnn Verdi	2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 December 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *23 December 2005 and 14 November 2007* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-28 are pending in the current application.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character “10” has been used to designate both ‘data object’ of Figure 1 and 'Begin' of Figure 2.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character “20” has been used to designate both ‘data object’ of Figure 1 and 'Registering entries of data objects' of Figure 2.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character “30” has been used to designate both ‘data object’ of Figure 1 and 'Registering entries of applications' of Figure 2.

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 220, Figure 1.

6. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "10" has been used to designate both 'data object' of Figure 1 and 'Master Data Object' of Figure 4.

7. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

8. Claims 1-28 are objected to because of the following informalities:

a. Claim 1, line 9, and claim 14, line 12 the recitation of "each entry", should be --each application entry--;

b. Claim 1, line 13, the recitation of "changes of the data objects", should be -- changes of the data object from a data object--, suggested amendment is to correct antecedent basis issue with line 15;

c. Claim 1, lines 16 and 18, the recitation of “the change ", should be –the changed data--;

d. Claim 5, lines 2, and claim 19, lines 1-2, the recitation of "the relevant changed sub-object data", should be --relevant changed sub-object data--;

e. Claim 8, lines 3-4 and claim 22, lines 2-3, the recitation of "a data object are relevant for the application”, should be -- the data object are relevant for the respective application--;

f. Claim 10, line 1, the recitation of “an object”, should be -- a data object--;

g. Claim 10, line 5, the recitation of “the key structure”, should be-- a key structure --;

h. Claim 10, line 6, the recitation of “the wrapper class", should be -- a wrapper class --;

i. Claim 11, line 4, the recitation of “the expected structure”, should be -- an expected structured --;

j. Claim 14, line 16, the recitation of “to changed data”, should be –to request changed data--, support for suggested amendment can be found in applicant’s specification, paragraph [0035], lines 1-3;

k. Claim 14, lines 19 and 20, the recitation of “the change ", should be the changed data --;

l. Claim 28 has the same deficiencies as claim 1. Further, “median” in line 1 appears to be a typographical error of –medium--.

m. Appropriate correction is required.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. **Claims 2-3, 12, 16-17, and 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

11. **Claim 12** recites the limitation

a. "the key data object" in line 3. There is insufficient antecedent basis for this limitation in the claim. *For purposes of examination the meaning of the key data object is interpreted as the key of the sub-object.*

b. "the data object" in line 4. There is insufficient antecedent basis for this limitation in the claim. *For purposes of examination the meaning of the data object is interpreted as the sub-object.*

c. "the object key object" in line 5. There is insufficient antecedent basis for this limitation in the claim. *For purposes of examination the meaning of the object key object is interpreted as the key of a key data object as claimed in claim 4.*

14. **Claim 26** has the same deficiencies as claim 12.

15. The claim language in the following claims is not clearly understood:

a. **As per Claim 2,** line 2, it is uncertain how a confirmation of changes is being expected. (i.e. expecting is equivalent to a receiving, Examiner suggests amending the claim as follows: *receiving a confirmation of changes*), support for this suggested amendment can be found in Applicant's specification paragraph [0041], lines 1-3.

b. **As per Claim 3,** line 2, it is unclear what is an expected conformation. (i.e. expected conformation is equivalent to the confirmation of changes, Examiner suggests amending the claim as follows: *triggering a mechanism if the confirmation of changes is not received*), support for this suggested amendment can be found in Applicant's specification paragraph [0041], lines 1-3.

c. **As per Claims 16 and 17**, they have the same deficiencies as claims 2 and 3 respectively;

Claim Rejections - 35 USC § 101

16. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

17. **Claims 1-28 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.**

18. **Claim 1** is directed to a process (method), however, the process is not limited to a particular practical application and does not pass the machine-or-transformation test

since the machine is not particular, as such the claims are not directed to statutory subject matter.

In contrast, a process claim which explicitly recites the particular machine or apparatus, recites a step that inherently involves the use of a particular machine or apparatus, or particularly transforms a particular article to a different state or thing is therefore directed to statutory subject matter.

The limitation of computer-implemented process does not clearly convey that the computer is programmed to perform the steps of the method.

Appropriate correction or amendment is required. **Claims 2-13** did not cure the deficiencies of claim 1.

12. **Claim 14** recites a "computer-implemented framework" however, it appears that a computer-implemented framework would reasonably be interpreted by one of ordinary skill in the art as software, per se since the body of the claim appears to be software. Applicant claims an agent, as described by Applicant's specification, appears to be a software structure. However, software structures are nonstatutory when claimed without reciting a tangible embodiment of the system. Applicant describes the functionality of an agent but does not disclose any hardware structure. As such, it is believed that a computer-implemented framework of claim 14 is reasonably interpreted as not limited to a practical application, per se and non statutory. **Claims 15-27** did not cure the deficiencies of claim 14.

13. **Claim 28** is directed to non-statutory subject matter. The broadest reasonable interpretation of a claim drawn to a computer readable medium (also called machine readable medium and other such variations) typically covers forms of non-transitory tangible media and transitory propagating signals *per se* in view of the ordinary and customary meaning of computer readable media, particularly when the specification is silent. *See* MPEP 2111.01. In view of Applicant's disclosure, being silent as to covering only non-transitory medium, the medium is not limited to a non-transitory tangible storage medium embodiments, instead being defined as including both storage medium embodiments (e.g., CD-ROM discs, ROM cards, floppy discs, magnetic tapes, computer hard drives) and transmission medium embodiments (e.g., carrier waves). As such, the claim is not limited to cover only statutory embodiments of a machine accessible median and is therefore non-statutory. To overcome this type of 101 rejection the claims need to be amended to include only the non-transitory tangible computer media (e.g., storage media) and not a transmission media or other intangible media.

14. For purposes of examination the meaning of "The machine accessible median" is interpreted as a machine readable storage device as described in Applicant's specification paragraph [0067] lines 1-5. Examiner suggests amending the claim as follows: *-A non-transitory machine readable storage device having instructions stored thereon that when executed by a processor cause the machine to-*.

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

20. **Claims 1, 4-9, 13-15, 18-23, and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brodsky et al. (hereinafter Brodsky) (U.S. Patent 5,991,536) in view of Attwood et al. (hereinafter Attwood) (U.S. Publication No. 2005/0015441 A1).**

21. **As to claim 1**, Brodsky teaches the invention substantially as claimed including a computer-implemented method for administrating data objects in an information technology architecture comprising a plurality of data objects (***i.e. "observed objects", col. 1, lines 66-67***) and a plurality of applications (***i.e. "observer objects", col. 2, line 1***), wherein each application processes (i.e. ***"information displayed on a monitor is updated" – information pertains to the observed object, col. 4, lines 35-36***) at least one of the data objects (***i.e. "updating the information in a view or window" - the information pertains to the observed object which has been changed, col. 4, lines 57-60***), the plurality of data objects being subject to changes (***i.e. "when a change is made to an observed object", col. 3, lines 32-33***), and wherein:

entries representative of data objects are registered in a first data structure (***i.e. "notification manager maintains a list of observed objects"- list of observed objects is a first data structure, col. 4, lines 44-45***);

entries representative of applications are registered (***i.e. "The observer objects register with the notification manager, so that they are notified when changes or modifications are made to the observed objects in the object hierarchy", col. 4, lines 28-31***) in a second data structure (***i.e. "notification manager maintains a list of observer objects"- list of observer objects is a second data structure, col. 4, lines 44-45***);

the method performing the following:

receiving notifications regarding registered data objects (***i.e. "observed object"***) as to changes of the data objects (i.e. ***"Whenever a change is made to a specified observed object in the object hierarchy, the notification manager is informed", col. 4, lines 49-51***);

upon each receipt of a notification (***"the notification manager is informed", col. 4, lines 50-51***), getting changed data (***i.e. "status information"***) from the notifying data object (***i.e. "the notification manager interfaces to the object hierarchy, accesses certain status information contained therein", col. 4, lines 51-53, "The object hierarchy includes the observed objects, and when a change is made to an observed object, generally by the user, this change is reflected in the object hierarchy", col. 3, lines 31-34, -an observed object which has been changed represents the notifying data object***);

checking (***i.e. "identifying***), among the registered applications (***i.e. "observer objects"***), whether the change is relevant for each individual application (***i.e. "The notification manager ... determines which observed objects have been modified, and then notifies the associated observer objects", col. 4, lines 51-55, - in order to notify the associated observer objects the notification manager calls a function for "identifying the observer objects that are registered with the observed object", col. 5, lines 2-3***), notifying an application (***i.e. "observer object"***) about the change if the change is relevant for that application (***i.e. "notifies the associated observer objects... with information concerning the change", col. 4, lines 54-57***); and

transmitting the relevant changed data (***i.e. "information concerning the change"***) to the application (***i.e. "The observer objects monitoring the observed object are notified in an unspecified order with information concerning the change", col. 4, lines 55-57 – an observed object represents the application - and the information concerning the change must contain the changed data since- "The notification manager ... invokes a function of the observed object provided by the BaseNotifier class to notify all observer objects registered with the observed object that the attribute A now has the name of "B"", col. 6, lines 36-41***).

22. Brodsky does not explicitly disclose each entry comprising specifying data objects whose changes are relevant for the respective application.

23. However Attwood teaches each entry (***i.e. "Register Interest" – entry created after application calls Register Interest function, paragraph [0069]***), comprising specifying data objects (***i.e. "objectIDs", paragraph [0075]) whose changes (i.e. "action" –action performed on data object which changes object, paragraph [0076]***) are relevant for the respective application (***i.e. "Client applications and components then attach event handlers to the Data Sync Service and register interest in object types, objects and actions", paragraph [0012], lines 5-7***).

24. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified the notification manager of Brodsky with the teachings of notification system from Attwood because this feature would have provided a mechanism which enables software applications to register interest in the actions performed on data objects, to notify other software applications of actions performed, and to receive notification events of the actions performed by other software applications which have a registered interest in common data objects (***paragraph [0003], lines 8-13 of Attwood***).

25. **As to claim 4**, Brodsky teaches registering entries of sub-objects (***i.e. subordinate observed objects in object hierarchy- "The object hierarchy 114***

includes the observed objects 112", col. 3, line 31, - subordinate observed objects registered with notification manager since the "notification manager maintains a list of observed objects, col. 4, lines 44-45), a sub-object being a set of data which is changed in dependence on a change of a key data object (***i.e. change to observed object would be cascaded to subordinate observed objects in the object hierarchy since "The object hierarchy 114 includes the observed objects 112, and when a change is made to an observed object 112, generally by the user, this change is reflected in the object hierarchy 114", col. 3, lines 31-34***).

26. **As to claim 5**, Brodsky teaches transmitting the relevant changed sub-object data (***i.e. "information concerning the change"***) to the application after notifying the application (***i.e. "The observer objects monitoring the observed object are notified in an unspecified order with information concerning the change", col. 4, lines 55-57 – an observed object represents the application - and the information concerning the change must contain the changed data since- "The notification manager ... invokes a function of the observed object provided by the BaseNotifier class to notify all observer objects registered with the observed object that the attribute A now has the name of "B"", col. 6, lines 36-41***).

27. **As to claim 6**, Brodsky does not explicitly disclose wherein specifying data objects whose changes are relevant for the respective application comprises: receiving a list of fields whose changes are relevant for the respective application.

28. However Attwood teaches wherein specifying data objects whose changes are relevant for the respective application comprises: receiving a list of fields (***i.e. "set of objectIDs", paragraph [0075]***) whose changes are relevant for the respective application (***an application will "register interest in specific objects", paragraph [0068], lines 1-3***). The motivation for modifying Brodsky with the teachings of Attwood is the same as provided in the rejection of claim 1 above.

29. **As to claim 7**, Brodsky teaches filtering out data objects whose changes are not to be communicated to an application (***i.e. "The notification manager... accesses certain status information contained therein, determines which observed objects have been modified, and then notifies the associated observer objects", col. 4, lines 51-54 – notification manager filters out observed objects that do not have associated observed objects since the notification manager only sends notifications to registered observer objects listed with the observed object– "the observer objects register with the notification manager, so that they are notified when changes or modifications are made to the observed objects", col. 4, lines 28-30), "where each observed object may have multiple observer objects", col. 4, lines 45-46***), prior to transmitting the relevant changed data to the application (***i.e. "...and then notifies the associated observer objects", col. 4, lines 54-55, "The observer objects monitoring the observed object are notified in an unspecified order with information concerning the change", col. 4, lines 55-57***).

30. **As to claim 8**, Brodsky does not explicitly disclose wherein registering entries representative of applications includes: specifying which changes of a data object are relevant for the application.

31. However Attwood teaches wherein registering entries representative of applications includes: specifying which changes (i.e. "set of actions", paragraph [0076]) of a data object are relevant for the application (***an application will "register interest in specific objects and the actions performed", paragraph [0068], lines 1-3***). The motivation for modifying Brodsky with the teachings of Attwood is the same as provided in the rejection of claim 1 above.

32. **As to claim 9**, Brodsky teaches registering the entries of data objects (***i.e. observed objects"***) and applications (***i.e. "observer objects"***) in a customization structure of an agent (***i.e. "all knowledge of how to notify the observer objects of changes in the observed objects in the object hierarchy is encapsulated in the notification manager", col. 4, lines 20-23, – notification manager acts a agent for the observed and observer objects – since "The notification manager acts as an intermediary between the observer object and the object hierarchy", col. 4, lines 26-27, "the object hierarchy includes the observed objects", col. 3, lines 31-32***).

33. **As to claim 13**, Brodsky does not explicitly disclose wherein a data object represents one of location, location-product, and transportation lane in context of a business application.

34. However Attwood teaches wherein a data object represents one of location (***i.e. "Destination" – is a data type for a data object defining – "the address or location of a machine, Table 1***), location-product, and transportation lane in context of a business application (***i.e. "medical application", "a set of related medical applications distributed across a hospital network may register interest in changes to all patients or a specific set of patients so that up to date patient information is always available to and used by all software applications of the hospital", paragraph [0005], lines 4-9***). The motivation for modifying Brodsky with the teachings of Attwood is the same as provided in the rejection of claim 1 above.

35. **As to claim 14**, this claim is rejected for the same reasons as claim 1 since claim 14 recites the same or equivalent invention, see the rejection to claim 1 above. In addition Brodsky teaches an agent (***i.e. "notification manager"***) for administrating changes of data objects (***i.e. "observed objects", "all knowledge of how to notify the observer objects of changes in the observed objects in the object hierarchy is encapsulated in the notification manager", col. 4, lines 20-23, – notification manager acts a agent for the observed and observer objects – since "The notification manager acts as an intermediary between the observer object and the***

object hierarchy", col. 4, lines 26-27, "the object hierarchy includes the observed objects", col. 3, lines 31-32).

36. **As to claim 15**, Brodsky teaches wherein the agent is further to:

present a first input interface (***i.e. "Object Composition View 204, Figure 2", "views in a graphical user interface (GUI) displayed on a monitor of the computer, col. 3, lines 64-65***) to allow for registering (***i.e. adding***) the entries representative of data objects (***i.e. "observed objects", "wherein these views are used to interact with the user in the construction of an object hierarchy or its component parts", col. 3, lines 66-67 and col. 4, lines 1-2, -an observed object created in the object hierarchy using a view is added to the list maintained by the notification manager***);

present a second input interface (***i.e. "a user interface object, such as a view or window displayed on a monitor attached to the computer", col. 3, lines 61-63***) to allow for registering the entries representative of applications (i.e. ***"observer object", "A typical observer object is a user interface object", col. 3, lines 60-61, which "register with the notification manager", col. 4, lines 28-29***).

37. **As to claims 18-19**, these claims are rejected for the same reasons as claims 4-5 since claims 18-19 recite the same or equivalent invention, see the rejections to claims 4-5 above.

38. **As to claims 20-23**, these claims are rejected for the same reasons as claims 6-9 since claims 20-23 recite the same or equivalent invention, see the rejections to claims 6-9 above.

39. **As to claim 27**, this claim is rejected for the same reasons as claim 13 since claim 27 recites the same or equivalent invention, see the rejection to claim 13 above.

40. **As to claim 28**, this claim is rejected for the same reasons as claim 1 since claim 28 recites the same or equivalent invention, see the rejection to claim 1 above.

41. **Claims 2-3, 10-12, 16-17, and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brodsky et al. (hereinafter Brodsky) (U.S. Patent 5,991,536) in view of Attwood et al. (hereinafter Attwood) (U.S. Publication No. 2005/0015441 A1), as applied to claims 1 and 14 above, and further in view of Reed et al. (hereinafter Reed) (U.S. Patent 6,044,205).**

42. **As to claim 2,** Brodsky as modified by Attwood does not explicitly disclose expecting a confirmation of changes from an application after transmitting the changed data to the application.

43. However Reed teaches expecting a confirmation of changes (***i.e. "receipt acknowledgement message return"," a receipt method assigned by a provider is***

a receipt acknowledgment message return", col. 37, lines 32-33) from an application (***i.e. "consumer program" 22, Figure 1***) after transmitting the changed data (***i.e. "communications object update"***) to the application (***i.e. "As shown in FIG. 1, this is a message 33 returned by consumer program 22 to provider program 12 via a communications network 3 available to both provider and consumer. This message acknowledges the consumer's receipt of the communications object or object update.", col. 37, lines 34-36***).

44. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified observer objects of Brodsky as modified by Attwood with the teachings of communications object from Reed because this feature would have provided a mechanism for updating the transferred information in the consumer computer when the information in provider computer has changed (col. 6, lines 24-26), and the updated information can be automatically received, processed, stored, and indexed by the consumer program 22 (***col. 28, lines 59-61***).

45. **As to claim 3**, Brodsky as modified by Attwood does not explicitly disclose triggering a mechanism if an expected conformation is not received.

46. However Reed teaches triggering a mechanism (***i.e. "taking necessary actions"***) if an expected conformation (***i.e. "acknowledgment"***) is not received (***"if the acknowledgment is not received, the method can take other necessary actions,***

such as retransmitting the response or notifying the consumer via the news report or other notification methods", col. 41, lines 64-67). The motivation for modifying Brodsky with the teachings of Attwood and Reed is the same as provided in the rejection of claim 2 above.

47. **As to claim 10**, Brodsky as modified by Attwood does not explicitly disclose wherein an entry for an object comprises: an ID representative of the data object; an ID representative of the key of the data object; a flag representative of activity; an ID representative of the key structure of the data object; and an ID of the wrapper class.

48. However Reed teaches wherein an entry for an object (***i.e. "Communications Object 110", Figure 3***), comprises: an ID representative of the data object (***i.e. "Name", col. 16, lines 62-64, "used as a label for identifying the element", col. 15, lines 57-58***); an ID representative of the key of the data object (**i.e. *"SystemID", col. 16, lines 62-64, "unique system ID value assigned to each unique communications object…equivalent of an automatically-generated unique key field ID", col. 18, lines 44-48***); a flag representative of activity (***i.e. "New Flag", col. 16, lines 62-65, "is set each time an element is changed", col. 15, lines 60-61***); an ID representative of the key structure of the data object (***i.e. "Description" – description of object normally identifies type and structure, col. 16, lines 62-64***) and an ID of the wrapper class (***i.e. "class attribute", "class communication object***

belongs to", col. 17, line 2). The motivation for modifying Brodsky with the teachings of Attwood and Reed is the same as provided in the rejection of claim 2 above.

49. **As to claim 11**, Brodsky as modified by Attwood does not explicitly disclose wherein an entry for an application comprises: an ID representative of the application; a flag representative of activity; an ID representative of the expected structure of notification.

50. However Reed teaches wherein an entry for an application (***i.e. "Recipient 120", Figure 3***) comprises: an ID representative of the application (***i.e. "System ID", "used to uniquely identify recipients", col. 17, lines 20-22***); a flag representative of activity (***"New Flag" -attribute shown in Figure 3, "is set each time an element is changed", col. 15, lines 60-61***); an ID representative of the expected structure of notification (***i.e. "AttachmentType" -attribute shown in Figure 3, "the type of encoding that should be used", col. 17, lines 25-26***). The motivation for modifying Brodsky with the teachings of Attwood and Reed is the same as provided in the rejection of claim 2 above.

51. **As to claim 12**, Brodsky as modified by Attwood does not explicitly disclose wherein an entry for a sub-object comprises: an ID representative of the sub-object; an ID representative of the key data object; an ID representative of the structure of the data object; an ID representative of the object key object.

52. However Reed teaches wherein an entry for a sub-object (***i.e. "Element 142", Figure 3***) comprises: an ID representative of the sub-object (***i.e. "Name…used as a label for identifying the element", col. 15, lines 57-58***); an ID representative of the key data object (***i.e. "SystemID … unique identification number", col. 15, lines 53-55***); an ID representative of the structure of the data object (***i.e. "Description" – description of object normally identifies type and structure, col. 15, lines 53-54)***; an ID representative of the object key object (i.e. ***"SystemID" - of Communications Object element is assigned to – "element 142… must be assigned to an object 110", col. 16, lines 58-60 and 62-64, "since each instance of a communications object system ID 110 or any or any component class system ID is unique within the provider's database, the combination of these system IDs creates a canonical naming system capable of uniquely identifying every communications object instance or object component class instance throughout the communications system", col. 19, lines 5-11***). The motivation for modifying Brodsky with the teachings of Attwood and Reed is the same as provided in the rejection of claim 2 above.

53. **As to claims 16-17**, these claims are rejected for the same reasons as claims 2-3 since claims 16-17 recite the same or equivalent invention, see the rejections to claims 2-3 above.

54. **As to claims 24-26**, these claims are rejected for the same reasons as claims 10-12 since claims 24-26 recite the same or equivalent invention, see the rejections to claims 10-12 above.

Conclusion

55. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KimbleAnn Verdi whose telephone number is (571)270-1654. The examiner can normally be reached on Monday-Friday 7:30am-5:00pm EST..

56. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung Sough can be reached on (571) 272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

57. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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03/14/10

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KV